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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,364

11/17/2003

Ashok Mehan

MP1725-US2

6674

7590

07/07/2006

Tyco Electronics Corporation
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EXAMINER

YAO, SAMCHUAN CUA

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/716,364	Applicant(s) MEHAN ET AL.	
	Examiner Sam Chuan C. Yao	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19, 22-35 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19, 22-29 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 30, 31, 34 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I (14-31,34,38 and 39) without traverse is acknowledged. Claims 32-33 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14-15, 22-29 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 59-121764 A in view of Klein (US 4,456,784) and de Vrieze et al (US 5,089,329).

With respect to claims 14-15, JP '764 discloses a process for forming a lamp assembly from a light emitting glass lamp having an end and a base. The process includes securing the end into the base using a foamable tape (i.e. shaped foamable material) (abstract; figures 1-2). While it is unclear how a foamable tape is applied to secure/couple the end into the base, it is recognized and understood that, a foamable tape must have to be applied onto a surface of a base and/or a surface of an end of a glass lamp in order to secure them together. In any event, it would have been obvious in the art to place a foamable tape inside a base or around an end of a glass lamp as such is a convenient way for applying foamable tape to a base and an end of a glass lamp in order to secure/bond them together. None, but only

the expected result of providing a foamable tape between surfaces of a base and an end of a glass lamp in order to secure them together would have been achieved.

The process taught by JP '764 differs from either of these claims in that, JP '764 does not teach: a) using copolymeric resins (e.g. ethylene vinyl acetate) recited in these claims and b) using microencapsulated blowing agent. However Klein discloses the desirability for using a foamable EVA composition in a chamber of a connector, where the connector includes electrical conductors extending through the chamber, and wherein an expanded EVA composition fills the chamber to provide barrier against vapors (col. 2 line 46 to col. 3 line 38 figures 1-2). Since the expanded EVA barrier in a chamber is contiguous to electrical conductors, this would have reasonably suggested to one in the art that a foamable EVA material would successfully be applied to various articles, where it would be exposed to a prolong exposure of elevated temperature such as a process for making a lamp assembly where a base and an end of a glass lamp are secured together with a foamable material. Additionally, an EVA resin is well recognized in the art to have an intrinsically good adhesive property. For these reasons, absent any showing of unexpected benefit, it would have been obvious in the art to use a foamable EVA for securing a base and an end of a glass lamp together. Moreover, it would have been obvious in the art to use microencapsulated blowing agent in forming a foamable EVA tape in the process of JP '764, because de Vrieze et al discloses the attractiveness for using microencapsulated blowing agent in making an expandable tape for power transmission cable (col. 1 line 40 to col. 2 line 5; col. 2 lines 40-68;

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col. 5 lines 4-6). The incentive for one in the art to use microencapsulated blowing agent would have simply been to obtain the self-evident advantages of preventing premature activation of a blowing agent in a foamable composition and also enabling for some processing flexibilities.

With respect to claims 22-29, the recited amount of blowing agent and operating temperature in these claims are typical amount of blowing agent and typical operating temperature for making a foamed material such as a foamed adhesive/sealant. Additionally, the limitations in these claims are taken to be result effective variables routinely optimized by those versed in the art in order to obtain the desired characteristics of a finished foamed tape while reducing the production cost. For these reasons, these claims would have been obvious in the art.

With respect to claims 38-39, see column 3 lines 8-38 of the Klein patent.

With respect to claims 40-41, while explicitly stated, it is understood that an expandable tape taught by JP '764 must have a rectangular shape. In any event, since most (if not all) expandable tape has a substantially rectangular shape for convenient in manufacturing, packaging and applications, it would have been obvious in the art to use a rectangularly shaped expandable tape in the process of JP '764.

4. Claims 16-19, 22-29 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 8 and further in view of Chang et al (US 5,979,902). Note: some of these claims has been already been

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rejected in numbered paragraph 3 above. Any duplicative rejection is simply used as a back-up rejection.

The recited materials and activation temperature range recited in these claims are art recognized effective way for formulating an expandable EVA sealant composition as exemplified in the teachings of Chang et al (abstract; col. 2 lines 39-51; col. 4 line 3 to col. 7 line 65 and particularly example 1). Absent any showing of unexpected benefit, one in the art would have determined, by routine experimentation, a suitable additives to a foamable EVA composition and a workable operating condition in forming a foamable EVA sealant/adhesive for a desired end-use of the foamable EVA sealant/adhesive.

Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: while the recited compositions recited in claims 30-32 and 34-35 is old in the art as evidence from the teachings of Chang et al (US 5,979,902), these claims are allowable, because there is no reasonable basis for using a foamable composition of Chang et al in the process suggested by JP '764 and in view of Counsel's argument that "... the foamable compositions of Chang et al may be able to withstand elevated temperatures for relatively short periods of time, ... the foam structure in these compositions would collapse on prolonged exposure to elevated temperatures for an extended period of time, such as 140 °C for 2000 hours as is required by IEC standards to which lamps must comply."

Response to Arguments

6. Applicant's arguments filed on 05-11-06 have been fully considered but they are not persuasive.

On page 10 full paragraph 2, Counsel argued that the deficiencies in JP '764 are not resolved by Klein. Counsel argued that, "...Klein's teaching of a foamable material for such a vapor barrier is analogous to the use of the recited coupling to secured a lamp". It is worth noting that, the EVA foamable material suggested by Klein is used to couple conductor (4) to a sleeve (1). See figure 2 of the Klein patent. More important, as noted above, since the expanded EVA barrier in a chamber is contiguous to electrical conductors, this would have reasonably suggested to one in the art that a foamable EVA material would successfully be applied to various articles, where it is exposed to a prolonged exposure of elevated temperature such as a process for making a lamp assembly where a base and an end of a glass lamp are secured together with a foamable material.

Additionally, an EVA resin is well recognized in the art to have an intrinsically good adhesive property. For these reasons, absent any showing of unexpected benefit, it would have been obvious in the art to use a foamable EVA for securing a base and an end of a glass lamp together. As for Counsel's argument regarding the application of blowing agent toward the end of full paragraph 2, contrary to Counsel's argument, the application of blowing agent is disclosed in Klein. See column 3 lines 25-28. As for the application of using

microencapsulated blowing agent, such would have been obvious in the art for reason set forth above.

As for Counsel's arguments on page 10 last full paragraph to page 11 regarding the Chang et al patent, Counsel's arguments are moot since the rejection of claims involving the Chang et al patent has been withdrawn.

Conclusion

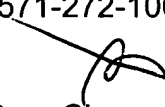
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richard Crispino can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
06-26-06